Nicole Riemer

List of Publications by Year
in descending order

45 papers	2,489 citations	236925 25 h-index	254184 43 g-index
69 all docs	69 docs citations	69 times ranked	2676 citing authors

#	Article	IF	Citations
1	Appreciation of Peer Reviewers for 2021. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	0
2	Chemistry Across Multiple Phases (CAMP) version 1.0: an integrated multiphase chemistry model. Geoscientific Model Development, 2022, 15, 3663-3689.	3.6	3
3	Quantifying the effects of mixing state on aerosol optical properties. Atmospheric Chemistry and Physics, 2022, 22, 9265-9282.	4.9	9
4	Estimating Submicron Aerosol Mixing State at the Global Scale With Machine Learning and Earth System Modeling. Earth and Space Science, 2021, 8, e2020EA001500.	2.6	15
5	Sensitivity of Carbonaceous Aerosol Properties to the Implementation of a Dynamic Aging Parameterization in the Regional Climate Model RegCM. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD033613.	3.3	1
6	Water uptake and optical properties of mixed organic-inorganic particles. Aerosol Science and Technology, 2021, 55, 1398-1413.	3.1	8
7	Evaluating the Impacts of Cloud Processing on Resuspended Aerosol Particles After Cloud Evaporation Using a Particleâ€Resolved Model. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034992.	3.3	0
8	Quantifying the structural uncertainty of the aerosol mixing state representation in a modal model. Atmospheric Chemistry and Physics, 2021, 21, 17727-17741.	4.9	8
9	Quantifying errors in the aerosol mixing-state index based on limited particle sample size. Aerosol Science and Technology, 2020, 54, 1527-1541.	3.1	2
10	The acidity of atmospheric particles and clouds. Atmospheric Chemistry and Physics, 2020, 20, 4809-4888.	4.9	327
11	Mixing state evolution of agglomerating particles in an aerosol chamber: Comparison of measurements and particle-resolved simulations. Aerosol Science and Technology, 2019, 53, 1229-1243.	3.1	2
12	Aerosol Mixing State: Measurements, Modeling, and Impacts. Reviews of Geophysics, 2019, 57, 187-249.	23.0	180
13	Machine Learning to Predict the Global Distribution of Aerosol Mixing State Metrics. Atmosphere, 2018, 9, 15.	2.3	21
14	Quantifying Impacts of Aerosol Mixing State on Nucleation-Scavenging of Black Carbon Aerosol Particles. Atmosphere, 2018, 9, 17.	2.3	17
15	Convergence of a generalized Weighted Flow Algorithm for stochastic particle coagulation. Journal of Computational Dynamics, 2018, .	1.1	7
16	Urban heat island impacted by fine particles in Nanjing, China. Scientific Reports, 2017, 7, 11422.	3.3	27
17	Simulating aerosol chamber experiments with the particle-resolved aerosol model PartMC. Aerosol Science and Technology, 2017, 51, 856-867.	3.1	10
18	Toward Reduced Representation of Mixing State for Simulating Aerosol Effects on Climate. Bulletin of the American Meteorological Society, 2017, 98, 971-980.	3.3	39

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19	Metrics to quantify the importance of mixing state for CCN activity. Atmospheric Chemistry and Physics, 2017, 17, 7445-7458.	4.9	33
20	Plume-exit modeling to determine cloud condensation nuclei activity of aerosols from residential biofuel combustion. Atmospheric Chemistry and Physics, 2017, 17, 9399-9415.	4.9	4
21	A single-column particle-resolved model for simulating the vertical distribution of aerosol mixing state: WRF-PartMC-MOSAIC-SCM v1.0. Geoscientific Model Development, 2017, 10, 4057-4079.	3.6	12
22	Black carbon mixing state impacts on cloud microphysical properties: Effects of aerosol plume and environmental conditions. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5990-6013.	3.3	22
23	A threeâ€dimensional sectional representation of aerosol mixing state for simulating optical properties and cloud condensation nuclei. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5912-5929.	3.3	21
24	Accelerated simulation of stochastic particle removal processes in particle-resolved aerosol models. Journal of Computational Physics, 2016, 322, 21-32.	3.8	7
25	A conceptual framework for mixing structures in individual aerosol particles. Journal of Geophysical Research D: Atmospheres, 2016, 121, 13,784.	3.3	98
26	Black carbon absorption at the global scale is affected by particle-scale diversity in composition. Nature Communications, 2016, 7, 12361.	12.8	97
27	Quantification of black carbon mixing state from traffic: implications for aerosol optical properties. Atmospheric Chemistry and Physics, 2016, 16, 4693-4706.	4.9	43
28	Chemical imaging of ambient aerosol particles: Observational constraints on mixing state parameterization. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9591-9605.	3.3	49
29	Explaining variance in black carbon's aging timescale. Atmospheric Chemistry and Physics, 2015, 15, 3173-3191.	4.9	44
30	The MESSy aerosol submodel MADE3 (v2.0b): description and a box model test. Geoscientific Model Development, 2014, 7, 1137-1157.	3.6	31
31	Modeling the evolution of aerosol particles in a ship plume using PartMC-MOSAIC. Atmospheric Chemistry and Physics, 2014, 14, 5327-5347.	4.9	29
32	Single particle diversity and mixing state measurements. Atmospheric Chemistry and Physics, 2014, 14, 6289-6299.	4.9	49
33	Quantifying aerosol mixing state with entropy and diversity measures. Atmospheric Chemistry and Physics, 2013, 13, 11423-11439.	4.9	70
34	When is cloud condensation nuclei activity sensitive to particle characteristics at emission?. Journal of Geophysical Research D: Atmospheres, 2013, 118, 13,476.	3.3	15
35	Impacts of black carbon mixing state on black carbon nucleation scavenging: Insights from a particleâ€resolved model. Journal of Geophysical Research, 2012, 117, .	3.3	36
36	Detailed heterogeneous oxidation of soot surfaces in a particle-resolved aerosol model. Atmospheric Chemistry and Physics, 2011, 11, 4505-4520.	4.9	49

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37	Weighted Flow Algorithms (WFA) for stochastic particle coagulation. Journal of Computational Physics, 2011, 230, 8427-8451.	3.8	47
38	MADE-in: a new aerosol microphysics submodel for global simulation of insoluble particles and their mixing state. Geoscientific Model Development, 2011, 4, 325-355.	3.6	61
39	Heterogeneous Atmospheric Chemistry, Ambient Measurements, and Model Calculations of N₂O₅: A Review. Aerosol Science and Technology, 2011, 45, 665-695.	3.1	212
40	Particleâ€resolved simulation of aerosol size, composition, mixing state, and the associated optical and cloud condensation nuclei activation properties in an evolving urban plume. Journal of Geophysical Research, 2010, 115, .	3.3	107
41	Estimating black carbon aging time-scales with a particle-resolved aerosol model. Journal of Aerosol Science, 2010, 41, 143-158.	3.8	112
42	Simulating the evolution of soot mixing state with a particleâ€resolved aerosol model. Journal of Geophysical Research, 2009, 114, .	3.3	162
43	Soot aging time scales in polluted regions during day and night. Atmospheric Chemistry and Physics, 2004, 4, 1885-1893.	4.9	166
44	Impact of the heterogeneous hydrolysis of N2O5on chemistry and nitrate aerosol formation in the lower troposphere under photosmog conditions. Journal of Geophysical Research, 2003, 108, .	3.3	141
45	Modeling aerosols on the mesoscale-Î³: Treatment of soot aerosol and its radiative effects. Journal of Geophysical Research, 2003, 108, .	3.3	75